State of Missouri
Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102

For Office Use Only

Installation Name:	_____	Permit No.:	_____
Installation ID No.:	_____	Effective Date	_____
PATS Project No.	_____	Expiration Date:	_____

GENERAL PERMIT

TO OPERATE

PERCHLOROETHYLENE DRY CLEANING INSTALLATIONS

IN

THE OUTSTATE MISSOURI AREA

- BASIC STATE --

In compliance with the provisions of Missouri State Rule 10 CSR 10-6.065, this perchloroethylene dry cleaning installation is authorized to operate in the Outstate Missouri Area, in accordance with emissions limitations, operating requirements and other conditions set forth in this General Permit.

Section IV – GENERAL PERMIT.

GENERAL PERMIT TO OPERATE A PERCHLOROETHYLENE DRY CLEANING INSTALLATION IN THE OUTSTATE MISSOURI AREA

Section 1.0 - Coverage Under This Permit

1.01 This installation shall qualify as a Basic State Installation as set forth in Missouri State Rule 10 CSR 10-6.065(1)(B).

1.02 This installation shall not qualify as an Intermediate State or Part 70 Installation as set forth in Missouri State Rule 10 CSR 10-6.065(1)(C) and (D).

1.03 The permittee shall be subject to an enforcement action for operating without an individual operating permit if it is later determined that the source does not qualify for this General Operating Permit. The permitting authority's decision to issue this permit is based on the representations made by the permittee in the General Operating Permit Application.

1.04 This general permit is valid only for the specific activity indicated in the General Operating Permit Application. Any deviation from the specific activity and the conditions for undertaking that activity shall constitute a violation of this permit.

Section 2.0 - Permit Flexibility and Modifications

2.01 The permittee shall have the permit flexibility to make changes at the perchloroethylene dry cleaning installation as long as the proposed change is not considered a permit modification or does not exceed the perchloroethylene consumption rate and all other activities, operational rates, and numbers of equipment as stated in the application, Section I-E., and the emission limitations in Section 6.0 of this permit. A permit modification includes any proposed change at the installation which will increase the potential emissions of carbon monoxide, nitrogen oxides, particulate matter less than ten microns, sulfur dioxide or volatile organic compounds, such that the installation's potential emissions will exceed 100 tons per year of any of the previously mentioned pollutants, or such that the installation's potential emissions of hazardous air pollutants becomes 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of combined hazardous air pollutants. If the permitting authority considers the proposed change as a modification, the perchloroethylene dry cleaning installation shall be required to obtain an individual permit issued under Missouri State Rule 10 CSR 10-6.065(6) Part 70 Operating Permits.

2.02 The owner or operator shall provide the permitting authority written notice at least seven (7) days prior to the proposed change. The written notice shall include a brief description of the change(s) within the permitted installation, the date on which the change is to occur, and any change in emissions. The permitting authority will notify the owner or operator whether the proposed change can be completed or will be considered a permit modification and have to undergo the appropriate procedures before the proposed change can be completed.

2.03 A permit modification will not be considered a permit change that:

1. Corrects typographical errors such as misspelled words, incorrect effective date, etc.;
2. Allows for a change in ownership or operational control of a perchloroethylene dry cleaning installation where the permitting authority determines that no other change in the general permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee must be submitted to the permitting authority;
3. Incorporates into this permit the requirements of a unified construction permit issued by the permitting authority as long as potential emissions are less than the major source threshold levels;
4. Does not increase the potential emissions equal to or greater than the major source threshold levels; or
5. Any other change that the permitting authority determines to be of similar nature to those in this subsection.

Section 3.0 - Permit Renewal and Expiration

3.01 This permit is issued for a fixed term of five (5) years. The permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted.

3.02 **Duty to reapply.** The owner or operator of the installation shall submit a timely and complete operating permit application for permit renewal in accordance with this section.

1. **Timely application renewal.** For purposes of permit renewal, a timely application is one that is submitted at least six (6) months prior to the date of permit expiration.

2. **Complete application.**

   a. An application will be deemed complete if it provides all the information required in the General Permit Application Form.

   b. The application for renewal shall include the current permit number, the appropriate renewal fee, description of any permit revisions and permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.

   c. After receipt the permitting authority shall determine whether the application is complete and inform the applicant that it is complete within sixty (60) days after receipt of the application. If the permitting authority determines that the application is not complete, it shall inform the applicant promptly.

   d. An installation which has submitted a timely and complete application may continue to operate without a permit from the date the application is determined to be complete subject to final action by the permitting authority on the renewal application, provided that the applicant submits any requested additional information by the deadline established by the permitting authority.

3. **Permit expiration.** Permit expiration terminates the installation's right to operate unless a timely and complete renewal application has been submitted.

Section 4.0 - General Compliance/Enforcement Provisions

4.01 **Compliance Requirement.** The permittee must comply with the applicable requirements and all conditions of this permit. Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official.

4.02 **Noncompliance.** Any permit noncompliance constitutes a violation and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

4.03 **Severability Clause.** The various requirements of this permit shall remain valid in the event of a challenge to any portion of the permit.

Section 5.0 - Permit Reopening Provision.

This General Permit may be reopened, revoked and reissued or terminated during its term, for cause.

Section 6.0 - Applicable Requirements.

The following rules shall apply to this installation. Consult the appropriate section in the Code of State Regulations (CSR) [or other "official" rule reference document) for the full text of the applicable requirements.

6.01 **Installation Level.** The following are deemed by Missouri DNR to be applicable on an installation-wide basis.

1. **General**
   a. *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
      (1) Emission Fees: $25.70 per ton of pollutant or the amount established by the Missouri Air Conservation Commission under Missouri Air Law 643.079(1) if changed.
      (2) Record Keeping Requirement: Submit Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
      (3) Monitoring Requirement: None
      (4) Reporting Requirement: April 1 for previous year's emissions (EIQ)

   b. 10 CSR 10-6.065, *Operating Permits*
      (1) The permittee shall obtain an operating permit for it's installation. The permittee is reminded that that the term of it's operating permit is five years. It shall file for renewal of this operating permit no sooner than eighteen months, no later than six months, prior to the expiration date of this operating permit.
      (2) Record Keeping Requirement: The permittee shall retain the most current operating permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.
      (3) Monitoring Requirement: None
      (4). Reporting Requirement: Annual Compliance Report and/or certification

   c. *Construction Permits Required,* 10 CSR 10-6.060
      (1) Emission Limitation: The Permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin

operation of any installation which has been shut down longer than five (5) years without first obtaining a permit from the permitting authority under this rule.
(2) Record Keeping Requirement: None
(3) Monitoring Requirement: None
(5) Reporting Requirement: None

d. *Open Burning Restrictions,* 10 CSR 10-3.030
(1) Emission Limitation: No person may conduct, cause, permit, or allow open burning of refuse, for salvage, or trade waste after September 17, 1971. (See specific regulation for exceptions to this limitation.)
(2) Record Keeping Requirement: Maintain files with letters from the director approving the open burning operation and previous DNR inspection reports.
(3) Monitoring Requirement: Annual DNR inspections/routine surveillance.
(4) Reporting Requirement: Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
(a) The name, address and telephone number of the person submitting the application;
(b) The type of business or activity involved;
(c) A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
(d) The schedule of burning operations;
(e) The exact location where open burning will be used to dispose of the trade wastes;
(f) Reasons why no method other than open burning is feasible; and
(g) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
(h) Upon approval of the application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt the permittee from the provisions of any other law, ordinance or regulation.

e. *Start-up, Shutdown, and Malfunction*, 10 CSR 10-6.050
(1) Emission Limitation: None
(2) Record Keeping Requirement: None
(3) Monitoring Requirement: None
(4) Reporting Requirement: The Permittee shall submit the following information to the director no later than fifteen (15) days after receipt of the notice of excess emissions:
(a) Name and location of installation;
(b) Name and telephone number of person responsible for the installation;
(c) The identity of the equipment causing the excess emissions;
(d) The time and duration of the period of excess emissions;
(e) The cause of the excess emissions;
(f) The type of air contaminant involved;
(g) A best estimate of the magnitude of the excess emissions expressed in the units of the applicable emission control regulation and the operating data and calculations used in estimating the magnitude;
(h) The measures taken to mitigate the extent and duration of the excess emissions; and
(i) The measures taken to remedy the situation which caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.

f. *Controlling Potential Emissions During Episodes of High Air Pollution Potential*, 10 CSR 10-6.130
   (1) Emission Limitation: This rule specifies the conditions that establish an air pollution alert (yellow/red), watch or emergency and the associated procedures and emissions reduction objectives for dealing with each.
   (2) Record Keeping Requirement: None
   (3) Monitoring Requirement: None
   (4) Reporting Requirement: Submission of emergency plan if required by the Director

g. *Circumvention*, 10 CSR 10-6.150
   (1) Emission Limitation: No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceal or dilute an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.
   (2) Record Keeping Requirement: Annual DNR inspection reports.
   (3) Monitoring Requirement: Periodic DNR inspections/routine surveillance
   (5) Reporting Requirement: None

h. *Restriction of Emission of Visible Air Contaminants,* 10 CSR 10-3.080
   (1) Emission Limitation: Opacity of emissions not to exceed or equal 20%.
   (2) Compliance Demonstration: Previous DNR inspection reports can be used to demonstrate compliance with this regulation.
   (3) Record Keeping Requirement: DNR inspection reports
   (4) Monitoring Requirement: Visual inspection, EPA Method 9; Performed during periodic DNR inspections.
   (5) Reporting Requirement: None.

i. *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
   (1) Emission Limitation: No visible particulate matter in the ambient air beyond property line of origin; or, no particulate matter found on surfaces beyond property line of origin.
   (2) Compliance Demonstration: Previous DNR inspection reports can be used to demonstrate compliance with this regulation.
   (3) Record Keeping Requirement: DNR inspection reports
   (4) Monitoring Requirement: Visual inspection performed during periodic DNR inspections
   (5) Reporting Requirement: None

j. *Restriction of Emission of Odors,* 10 CSR 10-3.090
   (1) Emission Limitation: This section requires that no person may cause, permit or allow the emissions of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one (1) volume of odorous air is diluted with seven (7) volumes of odor-free air for two (2) separate trials not less than fifteen (15) minutes apart within the period of one (1) hour.
   (2) Compliance Demonstration: Previous DNR inspection reports can be used to demonstrate compliance with this regulation.
   (3) Record Keeping Requirement: DNR inspection reports
   (4) Monitoring Requirement: Periodic DNR inspections
   (5) Reporting Requirement: None

6.02 **Boilers**

Note: If your installation has non-exempt boilers capable of being fired with fuel oil with total heat inputs less than 10 million BTUs/hr, it is subject to 10 CSR 10-3.060 and 10-6.260.

1. Particulate Matter (PM)
   a. *Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment used for Indirect Heating,* 10 CSR 10-3.060
      (1) Emission Limitation: No person may cause, allow or permit the emission of PM in excess of 0.6 pounds per million BTU.
      The "worst case" unit for a dry cleaning installation is a 10 million BTU/hr boiler fired with #5 fuel oil, which has a PM emission factor of 8.34A lbs/1000 gal, where A = 1.2. If while burning #5 fuel oil in the "worst case" boiler the PM emission rate (0.002 lbs/million BTU) is less than 0.6 lbs/million BTU, then all boilers are in compliance.
      (2) Record Keeping Requirement: None
      (3) Monitoring Requirement: None
      (4) Reporting Requirement: None

2. SO_X
   a. *Restriction of Emission of Sulfur Compounds,* 10 CSR 10-6.260
      (1) Emission Limitation:
         (a) The permittee shall not cause or permit the emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of 8 pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three (3)-hour time period.
         (b) The permittee shall not cause or permit the emissions of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.
         (c) Operating Permit Condition: Fuel oil exceeding 1.0% sulfur by weight shall not be used in the boiler.
      (2) Record Keeping Requirement: The source shall maintain an accurate record of the sulfur content of fuel oil receipts. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
      (3) Monitoring Requirement: No periodic monitoring for sulfur dioxide is necessary as long as the unit combusts fuel oil with less than 1.0% sulfur by weight.
      (4) Reporting Requirement: None

6.03 **Dry-to-Dry and Transfer Machine**

1. **General —** General requirements applicable to each dry-to-dry and transfer machine

   a. *National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities*, 40 CFR Part 63, Subpart M.
      (1) Emission Standards:
         (a) The owner or operator shall close the door of each dry cleaning machine immediately after transferring articles to or from the machine, and shall keep the door closed at all other times. (§63.322(c))
         (b) The owner or operator of each dry cleaning system shall operate and maintain the system according to the manufacturers' specifications and recommendations. (§63.322(d))
         (c) The owner or operator of an affected facility shall drain all cartridge filters in their housing, or other sealed container, for a minimum of 24 hours, or shall

treat such filters in an equivalent manner, before removal from the dry cleaning facility. (§63.322(i)

(d) The owner or operator of an affected facility shall store all perchloroethylene and wastes that contain perchloroethylene in solvent tanks or solvent containers with no perceptible leaks. (§63.322(j))

(e) The owner or operator of a dry cleaning system shall inspect the following components weekly for perceptible leaks while the dry cleaning system is operating: (§63.322(k))

i. Hose and pipe connections, fittings, couplings and valves; (§63.322(k)(1))
ii. Door gaskets and seatings; (§63.322(k)(2))
iii. Filter gaskets and seatings; (§63.322(k)(3))
iv. Pumps; (§63.322(k)(4))
v. Solvent tanks and containers; (§63.322(k)(5))
vi. Water separators; (§63.322(k)(6))
vii. Muck cookers; (§63.322(k)(7))
viii. Stills; (§63.322(k)(8))
ix. Exhaust dampers; (§63.322(k)(9))
x. Diverter Valves; (§63.322(k)(10)) and
xi. Cartridge filter housings. (§63.322(k)(11))

Note: Small area sources should inspect equipment every other week for perceptible leaks.

(f) The owner or operator of a dry cleaning system shall repair all perceptible leaks detected under paragraph 63.322(k) within 24 hours. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated within 2 working days of detecting such a leak. Such repair parts shall be installed within 5 working days after receipt. (§63.322(m))

(2) Record Keeping Requirement:

(a) Each owner or operator of a dry cleaning facility shall keep receipts of perchloroethylene purchases and a log of the following information and maintain such information on site and show it upon request for a period of 5 years: (§63.324(d))

i. The volume of perchloroethylene purchased each month by the dry cleaning facility as recorded from perchloroethylene purchase; if no perchloroethylene is purchased during a given month then the owner or operator would enter zero gallons into the log; (§63.324(d)(1))
ii. The calculation and result of the yearly perchloroethylene consumption determined on the first day of each month as specified in §63.323(d); (§63.324(d)(2))
iii. The dates when the dry cleaning system components are inspected for perceptible leaks as specified in §63.322(k) or (l), and the name or location of dry cleaning system components where perceptible leaks are detected. (§63.324(d)(3))
iv. The dates of repair and records of written or verbal orders for repair parts to demonstrate compliance with §63.322(m) or (n). (§63.324(d)(4))

(b) Each owner or operator of a dry cleaning facility shall retain onsite a copy of the design specifications and the operating manuals for each dry cleaning system and each emission control device located at the dry cleaning facility. (§63.324(e))

(3) Monitoring/Testing Requirement:

(a) When calculating yearly perchloroethylene consumption for the purpose of demonstration applicability according to §63.320, the owner or operator shall perform the following calculation on the first day of every month: (§63.323(d))

i. Sum the volume of all perchloroethylene purchases made in each of the previous 12 months as recorded in the log described in §63.324(d)(1). (§63.324(d)(1))
ii. If no perchloroethylene purchases were made in a given month, then the perchloroethylene consumption for that month is zero gallons. (§63.324(d)(2))
iii. The total sum calculated in paragraph (d) of this section is the yearly perchloroethylene consumption at the facility. (§63.324(d)(3))

(4) Reporting Requirement:

(a) Each owner or operator of a dry cleaning facility shall notify the Administrator or delegated State authority in writing within 270 calendar days after September 23, 1993 (i.e., June 18, 1994) and provide the following information: (§63.324(a))
i. The name and address of the owner or operator; (§63.324(a)(1))
ii. The address (that is, physical location) of the dry cleaning facility; (§63.324(a)(2))
iii. A brief description of the type of each dry cleaning machine at the dry cleaning facility; (§63.324(a)(3))
iv. Documentation as described in 63.323(d) of the yearly perchloroethylene consumption at the dry cleaning facility for the previous year to demonstrate applicability according to §63.320; or an estimation of perchloroethylene consumption for the previous year to estimate applicability with §63.320; (§63.324(a)(4)) and
v. A description of the type of control device(s) that will be used to achieve compliance with §63.322(a) or (b) and whether the control device(s) is currently in use or will be purchased. (§63.324(a)(5))
vi. Documentation to demonstrate to the Administrator's satisfaction that each room enclosure used to meet the requirements of §63.322(a)(3) meets the requirements of §63.322(a)(3)(i) and (ii). (§63.324(a)(6))

(b) Each owner or operator of a dry cleaning facility shall submit to the Administrator or delegated State authority by registered mail on or before the 30th day following the compliance dates specified in §63.320(b) or (c) or June 18, 1994, whichever is later, a notification of compliance status providing the following information and signed by a responsible official who shall certify its accuracy: (§63.324(b))
i. The yearly perchloroethylene solvent consumption limit based upon the yearly solvent consumption calculated according to §63.323(d); (§63.324(b)(1))
ii. Whether or not they are in compliance with each applicable requirement of §63.322; (§63.324(b)(2)) and
iii. All information contained in the statement is accurate and true. (§63.324(b)(3))

(c) Each owner or operator of an area source dry cleaning facility that exceeds the solvent consumption limit reported in §63.324(b) shall submit to the Administrator or a delegated State authority by registered mail on or before 180 calendar days from the date that the facility determines it has exceeded the amount specified, a notification of compliance status providing the following information and signed by a responsible official who shall certify its accuracy: (§63.324(c))
i. The new yearly perchloroethylene solvent consumption limit based upon the yearly solvent consumption calculated according to §63.323(d); (§63.324(c)(1))
ii. Whether or not they are in compliance with each applicable requirement of §63.322 (these are the new requirements from moving to a large area

source from a small area source or to a major source from a large area source); (§63.324(c)(2)) and

iii. All information contained in the statement is accurate and true. (§63.324(c)(3))

2. **Dry–to-Dry Machines using less than 140 gallons of perchloroethylene**
If your facility has only dry-to-dry machines and you use less than 140 gallons of perchloethylene during any 12 consecutive months as determined on the first of every month, you are subject to the following requirement in lieu of §63.322(k).
   a. *National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities*, 40 CFR Part 63, Subpart M.
      (1) Emission Standards: The owner or operator of a dry cleaning facility with a total facility consumption below the 140 gallon cutoff for dry-to-dry machines shall inspect the components listed in §63.322(k) biweekly for perceptible leaks while the dry cleaning system is operating. (§63.322 (l))

3. **Dry–to-Dry Machine and a Transfer Machine using less than 140 gallons of perchloroethylene**
If your facility has both dry-to-dry machines and transfer machines and you use less than 140 gallons of perchloethylene during any 12 consecutive months as determined on the first of every month, you are subject to the following requirement in lieu of (§63.322(k).
   a. *National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities*, 40 CFR Part 63, Subpart M.
      (1) Emission Standards: The owner or operator of a dry cleaning facility with a total facility consumption below the 140 gallon cutoff for transfer and dry-to-dry machines shall inspect the components listed in §63.322(k) biweekly for perceptible leaks while the dry cleaning system is operating. (§63.322 (l))

4. **Transfer Machine using less than 200 gallons of perchloroethylene**
If your facility has transfer machines and you use less than 200 gallons of perchloethylene during any 12 consecutive months as determined on the first of every month, you are subject to the following requirement in lieu of (§63.322(k).
   a. *National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities*, 40 CFR Part 63, Subpart M.
      (1) Emission Standards: The owner or operator of a dry cleaning facility with a total facility consumption below the 200 gallon cutoff for transfer machines shall inspect the components listed in §63.322(k) biweekly for perceptible leaks while the dry cleaning system is operating. (§63.322 (l))

5. **Existing Dry-to-Dry Machine with a Refrigerated Condenser using 140 gallons or more but less than 2,100 gallons of perchloroethylene**
If your facility is an existing large area source with dry-to-dry machines using refrigerated condensers as control devices, you are subject to the following additional requirements.
   a. *National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities*, 40 CFR Part 63, Subpart M.
      (1) Emission Standards:
         (a) The owner or operator of each existing dry cleaning system shall comply with paragraph (a)(1) of §63.322(a).
            i. Route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or an equivalent control device. (§63.322(a)(1))

(b) Each refrigerated condenser used for the purposes of complying with §63.322(a) or (b) and installed on a dry-to-dry machine: (§63.322(e))
i. Shall be operated to not vent or release the air-perchloroethylene gas-vapor stream contained within the dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating; (§63.322(e)(1))
ii. Shall be monitored according to §63.323(a)(1); (§63.322(e)(2)) and
iii. Shall be operated with a diverter valve, which prevents air drawn into the dry cleaning machine when the door of the machine is open from passing through the refrigerated condenser. (§63.322(e)(3))

(c) If the parameter values monitored under §63.322(e) do not meet the values specified in §63.323(a), adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. If repair parts must be ordered, either a written or verbal order for such parts shall be initiated within 2 working days of detecting such a parameter value. Such repair parts shall be installed within 5 working days after receipt. (§63.322(n))

(2) Record Keeping Requirement:
(a) Each owner or operator of a dry cleaning facility shall keep receipts of perchloroethylene purchases and a log of the following information and maintain such information on site and show it upon request for a period of 5 years: (§63.324(d))
i. The date and temperature sensor monitoring results as specified in §63.323, if a refrigerated condenser is used to comply with §63.322(a). (§63.324(d)(5))

(3) Monitoring Requirement: When a refirigerated condenser is used to comply with §63.322(a)(1), the owner or operator shall measure the temperature of the air-perchloroethylene gas-vapor stream on the outlet side of the refrigerated condenser on a dry-to-dry machine weekly with a temperature sensor to determine if it is equal to or less than 7.2 °C (45°F). The temperature sensor shall be used according to the manufacturer's instructions and shall be designed to measure a temperature of 7.2 °C (45°F) to an accuracy of ±1.1°C (±2°F). (§63.323(a)(1))

6. **Existing Dry-to-Dry Machine with a Carbon Adsorber using 140 gallons or more but less than 2,100 gallons of perchloroethylene**

If your facility is an existing large area source with dry-to-dry machines using carbon adsorbers as control devices, you are subject to the following additional requirements.

a. National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities, 40 CFR Part 63, Subpart M.

(1) Emission Standards:
(a) The owner or operator of each existing dry cleaning system shall comply with paragraph (a)(2) of §63.322(a).
i. Route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a carbon adsorber installed on the dry cleaning machine prior to September 22, 1993. (§63.322(a)(2)

(b) Each carbon adsorber used for the purposes of complying with §63.322(a): (§63.322(g))
i. Shall not be bypassed to vent or release the air-perchloroethylene gas-vapor stream to the atmosphere at any time; (§63.322(g)(1) and
ii. Shall be monitored according to the applicable requirements in §63.323(b). (§63.322(g)(2)

(c) If the parameter values monitored under §63.322(g) do not meet the values specified in §63.323(b), adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. If repair parts must be ordered, either a written or verbal order for such parts shall be initiated within 2 working days of detecting such a parameter value. Such repair parts shall be installed within 5 working days after receipt. (§63.322(n))

(2) Record Keeping Requirement:

(a) Each owner or operator of a dry cleaning facility shall keep receipts of perchloroethylene purchases and a log of the following information and maintain such information on site and show it upon request for a period of 5 years: (§63.324(d))

i. The date and colorimetric detector tube monitoring results as specified in §63.323, if a carbon adsorber to comply with §63.322(a)(2). (§63.324(d)(6))

(3) Monitoring Requirement: When a carbon adsorber is used to comply with §63.323(a)(2) or exhaust is passed through a carbon adsorber immediately upon machine door opening to comply with §63.322(b)(3), the owner or operator shall measure the concentration of perchloroethylene in the exhaust of the carbon adsorber weekly with a colorimetric detector tube, while the dry cleaning machine is venting to that carbon adsorber at the end of the last dry cleaning cycle prior to desorption of that carbon adsorber to determine that the perchloroethylene concentration in the exhaust is equal to or less than 100 parts per million by volume. The owner or operator shall: (§63.323(b))

(a) Use a colorimetric detector tube designed to measure a concentration of 100 parts per million by volume of perchloroethylene in air to an accuracy of ± 25 parts per million by volume; (§63.323(b)(1)) and

(b) Use the colorimetric detector tube according to the manufacturer's instructions; (§63.323(b)(2)) and

(c) Provide a sampling port for monitoring within the exhaust outlet of the carbon adsorber that is easily accessible and located at least 8 stack or duct diameters downstream from any flow disturbance such as a bend, expansion, contraction, or outlet; downstream from no other inlet; and 2 stack or duct diameters upstream from any flow disturbance such as a bend, expansion, contraction, inlet, or outlet. ((§63.323(b)(3))

7. **New Dry-to-Dry Machine using 140 gallons or more but less than 2,100 gallons of perchloroethylene**

If your facility is a new large area source with dry-to-dry machines, you are subject to the following additional requirements.

a. National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities, 40 CFR Part 63, Subpart M.

(1) Emission Standards:

(a) The owner or operator of each new dry-to-dry machine its ancillary equipment installed after September 22, 1993 shall route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or an equivalent control device: (§63.322(b)(1))

(b) Each refrigerated condenser used for the purposes of complying with §63.322(a) or (b) and installed on a dry-to-dry machine, dryer or reclaimer: (§63.322(e))

i. Shall be operated to not vent or release the air-perchloroethylene gas-vapor stream contained within the dry cleaning machine to the

atmosphere while the dry cleaning machine drum is rotating; (§63.322(e)(1))
ii. Shall be monitored according to §63.323(a)(1); (§63.322(e)(2)) and
iii. Shall be operated with a diverter valve, which prevents air drawn into the dry cleaning machine when the door of the machine is open from passing through the refrigerated condenser. (§63.322(e)(3))

(c) If the parameter values monitored under §63.322(e) do not meet the values specified in §63.323(a), adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. If repair parts must be ordered, either a written or verbal order for such parts shall be initiated within 2 working days of detecting such a parameter value. Such repair parts shall be installed within 5 working days after receipt. (§63.322(n))

(2) Record Keeping Requirement: Each owner or operator of a dry cleaning facility shall keep receipts of perchloroethylene purchases and a log of the following information and maintain such information on site and show it upon request for a period of 5 years. (§63.323(d))

(a) The date and temperature sensor monitoring results as specified in §63.323, if a refrigerated condenser is used to comply with §63.322(a). (§63.324(d)(5))

(3) Monitoring Requirement: When a refrigerated condenser is used to comply with §63.322(a)(1), the owner or operator shall measure the temperature of the air-perchloroethylene gas-vapor stream on the outlet side of the refrigerated condenser on a dry-to-dry machine, dryer, or reclaimer weekly with a temperature sensor to determine if it is equal to or less than 7.2 °C (45°F). The temperature sensor shall be used according to the manufacturer's instructions and shall be designed to measure a temperature of 7.2 °C (45°F) to an accuracy of ±1.1°C (±2°F). (§63.323(a)(1))

8. **Existing Transfer Machine with a Refrigerated Condenser on either a Dry-to-Dry Machine, Dryer, or Reclaimer using 200 gallons or more but less than 1,800 gallons of perchloroethylene**

If your facility is an existing large area source with transfer machines using refrigerated condensers as control devices on a dry-to-dry machine, dryer, or reclaimer, you are subject to the following additional requirements.

a. National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities, 40 CFR Part 63, Subpart M.

(1) Emission Standards:

(a) The owner or operator of each existing dry cleaning system and of each new transfer machine system and its ancillary equipment installed between December 9, 1991 and September 22, 1993 shall comply with paragraph (a)(1) of §63.322(a):
i. Route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or an equivalent control device. (§63.322(a)(1))

(b) Each refrigerated condenser used for the purposes of complying with §63.322(a) or (b) and installed on a dry-to-dry machine, dryer or reclaimer: (§63.322(e))
i. Shall be operated to not vent or release the air-perchloroethylene gas-vapor stream contained within the dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating; (§63.322(e)(1))
ii. Shall be monitored according to §63.323(a)(1); (§63.322(e)(2)) and

iii. Shall be operated with a diverter valve, which prevents air drawn into the dry cleaning machine when the door of the machine is open from passing through the refrigerated condenser. (§63.322(e)(3))

(c) If the parameter values monitored under §63.322(e) do not meet the values specified in §63.323(a), adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. If repair parts must be ordered, either a written or verbal order for such parts shall be initiated within 2 working days of detecting such a parameter value. Such repair parts shall be installed within 5 working days after receipt. (§63.322(n))

(2) Record Keeping Requirement: Each owner or operator of a dry cleaning facility shall keep receipts of perchloroethylene purchases and a log of the following information and maintain such information on site and show it upon request for a period of 5 years. (§63.324(d))

(a) The date and temperature sensor monitoring results as specified in §63.323, if a refrigerated condenser is used to comply with §63.322(a). (§63.324(d)(5))

(3) Monitoring Requirement: When a refrigerated condenser is used to comply with §63.322(a)(1), the owner or operator shall measure the temperature of the air-perchloroethylene gas-vapor stream on the outlet side of the refrigerated condenser on a dry-to-dry machine, dryer, or reclaimer weekly with a temperature sensor to determine if it is equal to or less than 7.2 °C (45°F). The temperature sensor shall be used according to the manufacturer's instructions and shall be designed to measure a temperature of 7.2 °C (45°F) to an accuracy of ±1.1°C (±2°F). (§63.323(a))

9. **Existing Transfer Machine with a Refrigerated Condenser on the Washer using 200 gallons or more but less than 1,800 gallons of perchloroethylene**

If your facility is an existing large area source with transfer machines using refrigerated condenser on the washer as control device, you are subject to the following additional requirements.

a. National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities, 40 CFR Part 63, Subpart M.

(1) Emission Standards:

(a) The owner or operator of each existing dry cleaning system shall comply with paragraph (a)(1) of §63.322(a):

i. Route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or an equivalent control device. (§63.322(a)(1))

(b) Each refrigerated condenser used for the purposes of complying with §63.322(a) and installed on a washer: (§63.322(f))

i. Shall be operated to not vent or release the air-perchloroethylene gas-vapor stream contained within the dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating; (§63.322(f)(1))

ii. Shall be monitored according to §63.323(a)(2); (§63.322(f)(2)) and

iii. Shall not use the same refrigerated condenser coil for the washer that is used that is used by a dry-to-dry machine, dryer, or reclaimer. (§63.322(f)(3))

(c) If the parameter values monitored under §63.322(f) do not meet the values specified in §63.323(a), adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. If repair parts must be ordered, either a written or verbal order for such parts shall be initiated within 2 working days of detecting such a parameter value. Such

repair parts shall be installed within 5 working days after receipt. (§63.322(n))

(2) Record Keeping Requirement: Each owner or operator of a dry cleaning facility shall keep receipts of perchloroethylene purchases and a log of the following information and maintain such information on site and show it upon request for a period of 5 years. (§63.324(d))

(a) The date and temperature sensor monitoring results as specified in §63.323, if a refrigerated condenser is used to comply with §63.322(a). (§63.324(d)(5))

(3) Monitoring Requirement: When a refrigerated condenser is used to comply with §63.322(a)(1): (§63.323(a))

(a) The owner or operator shall calculate the difference between the temperature of the air-perchloroethylene gas-vapor stream entering the refrigerated condenser on a washer and the temperature of the air-perchloroethylene gas-vapor stream exiting the refrigerated condenser on the washer weekly to determine that the difference is greater than or equal to 11.1°C (20°F). (§63.323(a)(2))

i. Measurements of the inlet and outlet streams shall be made with a temperature sensor. Each temperature sensor shall be used according to the manufacturer's instructions, and designed to measure at least a temperature range from 0°C (32°F) to 48.9°C (120°F) to an accuracy of ± 1.1°C (± 2°F). (§63.323(a)(2)(i))

ii. The difference between the inlet and outlet temperatures shall be calculated weekly from the measured values. (§63.323(a)(2)(ii))

10. **Existing Transfer Machine with a Carbon Adsorber using 200 gallons or more but less than 1,800 gallons of perchloroethylene**

If your facility is an existing large area source with transfer machines using carbon adsorbers as control devices, you are subject to the following additional requirements.

a. National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities, 40 CFR Part 63, Subpart M.

(1) Emission Standards:

(a) The owner or operator of each existing dry cleaning system shall comply with paragraph (a)(2) of §63.322(a):

i. Route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a carbon adsorber installed on the dry cleaning machine prior to September 22, 1993. (§63.322(a)(2))

(b) Each carbon adsorber used for the purposes of complying with §63.322(a): (§63.322(g))

i. Shall not be bypassed to vent or release the air-perchloroethylene gas-vapor stream to the atmosphere at any time; (§63.322(g)(1)) and

ii. Shall be monitored according to the applicable requirements in §63.323(b). (§63.322(g)(2))

(c) If the parameter values monitored under §63.322(g) do not meet the values specified in §63.323(a) or (b), adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. If repair parts must be ordered, either a written or verbal order for such parts shall be initiated within 2 working days of detecting such a parameter value. Such repair parts shall be installed within 5 working days after receipt. (§63.322(n))

(2) Record Keeping Requirement:

(a) Each owner or operator of a dry cleaning facility shall keep receipts of perchloroethylene purchases and a log of the following information and

maintain such information on site and show it upon request for a period of 5 years: (§63.324(d))

i. The date and colorimetric detector tube monitoring results as specified in §63.323, if a carbon adsorber to comply with §63.322(a)(2). (§63.324(d)(6))

(3) Monitoring Requirement: When a carbon adsorber is used to comply with §63.322(a)(2) or exhaust is passed through a carbon adsorber immediately upon machine door opening to comply with §63.322(b)(3), the owner or operator shall measure the concentration of perchloroethylene in the exhaust of the carbon adsorber weekly with a colorimetric detector tube, while the dry cleaning machine is venting to that carbon adsorber at the end of the last dry cleaning cycle prior to desorption of that carbon adsorber to determine that the perchloroethylene concentration in the exhaust is equal to or less than 100 parts per million by volume. The owner or operator shall: (§63.323(b))

(a) Use a colorimetric detector tube designed to measure a concentration of 100 parts per million by volume of perchloroethylene in air to an accuracy of ± 25 parts per million by volume; (§63.323(b)(1)) and

(b) Use the colorimetric detector tube according to the manufacturer's instructions; (§63.323(b)(2)) and

(c) Provide a sampling port for monitoring within the exhaust outlet of the carbon adsorber that is easily accessible and located at least 8 stack or duct diameters downstream from any flow disturbance such as a bend, expansion, contraction, or outlet; downstream from no other inlet; and 2 stack or duct diameters upstream from any flow disturbance such as a bend, expansion, contraction, inlet, or outlet. (§63.323(b)(3))

11. **Transfer Machine and Dry-to-Dry Machine using 140 gallons or more but less than 1,800 gallons of perchloroethylene**

If your installation contains a transfer machine and a dry-to-dry machine using perchloroethylene in an amount equal to or greater than 140 gallons and less than 1,800 gallons during any 12 consecutive months as determined on the first of every month, you are subject to the following additional requirements specific to the transfer machine stated in 6.03 (8., 9., and 10.) even if you are below the 200 gallon requirement; and the dry-to-dry machine stated in 6.03 (5., 6., and 7.)

Section 7.0 - Pollution Control Requirements.

7.01 The permittee shall comply with the following general control requirements:

Storing solvent and waste materials in containers which are impervious and chemically unreactive to perchloroethylene, examining containers for leakage, closing and securing machine doors except during loading and unloading, draining cartridge filters in their housing for at least a 24-hour period, and maintaining the solvent-to-carbon ratio and steam pressure for carbon beds in accordance with the manufacturer's specifications.

7.02 All required control devices shall be implemented upon the respective emission units at all times that the units are in operation. When control devices are operated, they shall be operated and maintained in accordance with the manufacturer's specifications.

Section 8.0 – Processing Limits/Record Keeping/ Reporting.

8.01 Processing Limits:

The permittee shall be limited to a maximum consumption rate of perchloroethylene and all other activities, operational rates, and numbers of equipment as stated in the application.

8.02 **Record keeping.**

The permitte shall keep receipts of perchloroethylene purchases and a log of the following information on site and show it upon request for a period of 5 years:

1. The volume of perchloroethylene purchased each month by the dry cleaning facility as recorded from perchloroethylene purchases; if no perchloroethylene is purchased during a given month then the owner or operator would enter zero gallons into the log. A format similar to Attachment A may be used. (§63.324(d)(1))

2. The calculation and result of the yearly perchloroethylene consumption determined on the first day of each month by summing the volume of all perchloroethylene purchases made in each of the previous 12 months. A format similar to Attachment A may be used. (§63.324(d)(2))

3. The dates when the dry cleaning system components are inspected for perceptible leaks and the name or location of dry cleaning system components where perceptible leaks are detected. A format similar to Attachment B may be used. (§63.324(d)(3))

4. The dates of repair and records of written or verbal orders for parts. (§63.324(d)(4))

5. The date and temperature sensor monitoring results. A format similar to Attachment C may be used. (§63.324(d)(5))

6. The date and colorimetric detector tube monitoring results, if applicable. A format similar to Attachments D may be used. (§63.324(d)(6))

8.03 **Reporting.**

This installation shall report to the Air Pollution Control Enforcement Section, no later than ten (10) days after the end of each month, if the 12-month cumulative total records show that the source exceeded the consumption rate of perchloroethylene and all other activities, operational rates, and numbers of equipment as stated in the application, Section I-E.

Section 9.0 - Records Retention

9.01 All record keeping must be retained at the installation for a minimum period of five (5) years, and shall be made available immediately to representatives of the permit authority upon verbal request.

9.02 The permittee shall maintain on site copies of the design specifications and copies of operating manuals for each dry cleaning system and each emission control devises located at the installation.

9.02 The permittee shall maintain a copy of this permit and permit application at this installation. A copy of this permit and permit application shall be placed on-file at each approved source no later than 30 days after the date of the letter of transmittal.

Section 10.0 - Inspection and Entry

10.01 The permittee shall allow authorized representatives of the permitting authority to perform the following:

1. Enter upon the permittee's premises where the Basic State source or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operation regulated or required under this permit; and

4. Sample or monitor any substances or parameters at any location, during operating hours, for the purpose of assuring permit compliance.

10.02 No person shall obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out her/his official duties. Refusal of entry or access may constitute grounds for permit revocation and enforcement action.

ATTACHMENT A
PERC CONSUMPTION RECORD

MONTH	QUANTITY PURCHASED (GAL)	12 MONTH TOTAL FROM ___THROUGH__	12 MONTH TOTAL (GAL)	NOTES

ATTACHMENT B
LEAK DETECTION INSPECTION LOG

DATE _____ MACHINE NO. _____

INSPECTOR _____

Inspection done by (check the appropriate box):

Θ Sight, smell, and feel

Θ Monitoring instrument (Type: _____)

Inspect the following items for leaks		**Signs of Leaking**	
1	Hose and pipe connections,fittings, couplings, valves	YES	NO
2.	Door gaskets and seatings	YES	NO
3.	Pumps	YES	NO
4.	Solvent tanks and containers	YES	NO
5.	Water separators	YES	NO
6.	Muck cookers	YES	NO
7.	Stills	YES	NO
8.	Exhaust dampers	YES	NO
9.	Diverter valves	YES	NO
10.	Filter gaskets and seatings	YES	NO
11.	Cartridge filter housings	YES	NO

ATTACHMENT C1
REFRIGERATED CONDENSER WEEKLY TEMPERATURE LOG

FOR A DRY-TO-DRY MACHINE, A DRYER, OR A RECLAIMER, MEASURE THE TEMPERATURE ON OUTLET SIDE OF REFRIGERATED CONDENSER.

DATE	INSPECTORS INITIALS	MACHINE NO.	TEMPERATURE (□F)	IS TEMPERATURE < 45 □F?
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO

ATTACHMENT C2
REFRIGERATED CONDENSER WEEKLY TEMPERATURE DIFFERENCE LOG

FOR A WASHER, MEASURE THE TEMPERATURE OF THE INLET AND OUTLET SIDES OF THE REFRIGERATED CONDENSER ON THE WASHER AND CALCULATE THE DIFFERENCE.

DATE	INSPECTORS INITIALS	MACHINE NO.	INLET TEMPERATURE (□F)	OUTLET TEMPERATURE (□F)	IS TEMPERATUREDIFFERENCE > 20 □F?
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO
					YES / NO

ATTACHMENT D
CARBON ADSORBER WEEKLY PERC CONCENTRATION LOG

MEASURE THE CONCENTRATION OF THE PERC IN THE EXHAUST DUCT AFTER THE CARBON ADSORBER.

DATE	INSPECTORS INITIALS	MACHINE NO.	CONCENTRATION (PPM)	IS CONCENTRATION < 100 PPM
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO
				YES / NO